

What is claimed is:

1 1. A function module comprising:
2 a first circuit board including a first surface,
3 with a first ground layer formed thereon;
4 a second circuit board, coupled to the first circuit
5 board, including a second surface facing the
6 first surface, wherein a second ground layer is
7 formed on the second surface; and
8 a plate-type heat dissipation device, disposed
9 between the first circuit board and the second
10 circuit board, abutting the first ground layer
11 and the second ground layer respectively.

1 2. The function module as claimed in claim 1,
2 wherein the first circuit board further includes a third
3 surface, opposite to the first surface, with a first
4 device located thereon.

1 3. The function module as claimed in claim 1,
2 wherein the second circuit board further includes a
3 fourth surface, opposite to the second surface, with a
4 second device located thereon.

1 4. The function module as claimed in claim 1,
2 wherein the first ground layer comprises a copper layer.

1 5. The function module as claimed in claim 1,
2 wherein the second ground layer comprises a copper layer.

1 6. The function module as claimed in claim 1,
2 further comprising a flat cable connecting the first

3 circuit board and the second circuit board, providing
4 communicability therebetween.

1 7. The function module as claimed in claim 1,
2 wherein the first circuit board includes a first
3 connector, the second circuit board includes a second
4 connector corresponding to the first connector, and the
5 first circuit board and the second circuit board
6 communicate with each other by the respective connectors.

1 8. The function module as claimed in claim 7,
2 wherein the first connector is located on the first
3 surface, and the second connector is located on the
4 second surface.

1 9. The function module as claimed in claim 1,
2 further comprising a slot connector connecting the first
3 circuit board and the second circuit board, providing
4 communicability therebetween.

1 10. The function module as claimed in claim 1,
2 wherein the plate-type heat dissipation device is a
3 plate-type heat pipe, a copper plate, a plate-type copper
4 block, a micro fin, a water-cooling device, or a vapor
5 chamber.

1 11. The function module as claimed in claim 1,
2 further comprising a heat dissipation fin, connected to
3 the plate-type heat dissipation device, for further
4 dissipation of heat therefrom.

1 12. The function module as claimed in claim 11,
2 further comprising a fan, connected to the heat

3 dissipation fin, for further dissipation of heat
4 therefrom.

1 13. The function module as claimed in claim 1,
2 further comprising:

3 a first adhesion layer, disposed between the plate-
4 type heat dissipation device and the first
5 ground layer, for combining the plate-type heat
6 dissipation device with the first circuit
7 board; and

8 a second adhesion layer, disposed between the plate-
9 type heat dissipation device and the second
10 ground layer, for combining the plate-type heat
11 dissipation device with the second circuit
12 board.

1 14. The function module as claimed in claim 13,
2 wherein both the first adhesion layer and the second
3 adhesion layer comprise one selected from the group
4 consisting of brazing solder, tin solder, thermal
5 interface material, grease and the combination thereof
6 respectively.

1 15. A function module comprising:

2 a first circuit board including a first surface with
3 a first heat conduction layer formed thereon;
4 a second circuit board, coupled to the first circuit
5 board, including a second surface facing the
6 first surface, on which a second heat
7 conduction layer is formed; and

8 a plate-type heat dissipation device, disposed
9 between the first circuit board and the second
10 circuit board, abutting the first heat
11 conduction layer and the second heat conduction
12 layer respectively.

1 16. The function module as claimed in claim 15,
2 wherein the first heat conduction layer is a ground layer
3 of the first circuit board, and the second heat
4 conduction layer is a ground layer of the second circuit
5 board.

1 17. The function module as claimed in claim 15,
2 wherein the first circuit board further includes a third
3 surface, opposite to the first surface, with a first
4 device located thereon.

1 18. The function module as claimed in claim 15,
2 wherein the second circuit board further includes a
3 fourth surface, opposite to the second surface, with a
4 second device located thereon.

1 19. The function module as claimed in claim 15,
2 wherein the first heat conduction layer comprises a
3 copper layer.

1 20. The function module as claimed in claim 15,
2 wherein the second heat conduction layer comprises a
3 copper layer.

1 21. The function module as claimed in claim 15,
2 further comprising a flat cable connecting the first

3 circuit board and the second circuit board, providing
4 communicability therebetween.

1 22. The function module as claimed in claim 15,
2 wherein the first circuit board includes a first
3 connector, the second circuit board includes a second
4 connector corresponding to the first connector, and the
5 first circuit board and the second circuit board
6 communicate with each other by the respective connectors.

1 23. The function module as claimed in claim 22,
2 wherein the first connector is located on the first
3 surface, and the second connector is located on the
4 second surface.

1 24. The function module as claimed in claim 15,
2 further comprising a slot connector connecting the first
3 circuit board and the second circuit board, providing
4 communicability therebetween.

1 25. The function module as claimed in claim 15,
2 wherein the plate-type heat dissipation device is a
3 plate-type heat pipe, a copper plate, a plate-type copper
4 block, a micro fin, a water-cooling device, or a vapor
5 chamber.

1 26. The function module as claimed in claim 15,
2 further comprising a heat dissipation fin, connected to
3 the plate-type heat dissipation device, for dissipating
4 heat therefrom.

1 27. The function module as claimed in claim 26,
2 further comprising a fan, connected to the heat
3 dissipation fin, for dissipating heat therefrom.

1 28. The function module as claimed in claim 15,
2 further comprising:

3 a first adhesion layer, disposed between the plate-
4 type heat dissipation device and the first heat
5 conduction layer, attaching the plate-type heat
6 dissipation device to the first circuit board;
7 and

8 a second adhesion layer, disposed between the plate-
9 type heat dissipation device and the second
10 heat conduction layer, attaching the plate-type
11 heat dissipation device to the second circuit
12 board.

1 29. The function module as claimed in claim 28,
2 wherein both the first adhesion layer and the second
3 adhesion layer comprise one selected from the group
4 consisting of brazing solder, tin solder, thermal
5 interface material, or grease and the combination thereof
6 respectively.